

Switch Counts Per Closet Per School

NOTE 1: Switches / Ports listed in the following list include those ports currently being used to support legacy Wireless Access Points (APs). Port Counts for new Multi-Gig PoE+ ports supporting the new 802.11ac Wave2 APs should be deducted from these counts for estimated switch/port counts to support legacy workstations, phones, printers & IP-based cameras.

NOTE 2: In many instances, all ports on the switches listed below are not fully connected. Please use the following information to provide estimated switch counts to develop per-school pricing. Actual required port counts will be verified during pricing negotiations so "best and final price" may be presented.

NOTE 3: All schools except the HS/NGC are equipped with a Cisco Catalyst 3750G-12S switch located in their MDFs that serves to aggregate FOC uplinks from IDFs and present them to the District's WAN connections. These may continue to be used to support the legacy wired network system, but if necessary, a new aggregation switch may be required at some or all schools network cores to aggregate the Multi-Gig Switches and present them on the WAN to the NOC and DOC.

NOTE 4: Eanes Elementary School (EES) is a special case because it is so spread out. As a result, OM4 FOC links from the MDF to the farthest reaches of the site would exceed standards for full bandwidth network transmission. As a result, two signal regeneration / cross-connection points have been identified where an aggregation switch can be installed to connect downline equipment, regenerate the signal and pass it along to the MDF:

- 1) one at IDF C near the library to allow Portable buildings P3/4, P5/6, P7/8, P9/10 and P11/12 to connect to an aggregation switch which, in turn can be uplinked to the MDF - all with MM fiber. (These portables can each be connected to this aggregation switch; or, given the low numbers of users in these rooms, the switches in the portables could be daisy-chained to present fewer connections at the regeneration location.)
- 2) another at IDF I located in Room I-223 to allow network equipment in down-line IDF to connect to the MDF using MM Fiber (IDF-J, IDF-K, IDF-L and the IDF serving the Cafeteria/Gym)

Adult Transition Services (ATS):

MDF - 1x 48 Port Switch - not shown on floorplans

BCE:

MDF - Library - 5x 48 Port Switches

300W IDF - 3x 48 Port Switches

Lab IDF - 5x 48 Port Switches

BPE:

MDF - Library - 5x 48 Port Switches

IDF - Upstairs Lounge - 10x 48 Port Switches

Central Administration:

MDF - 4x 48 Port Switches, 1x 3750
Grounds - 1x 24 Port Switch
Portable - 1x 48 Port Switch
Rockhouse - 1x 48 Port Switch, 1x 24 Port Switch

CCE:

MDF - 6x 48 Port Switches, 1x 3750
IDF A - 2x 48 Port Switches
Library - 4x 48 Port Switches
Portable A - 1x 24 Port Switch
Portable B - 1x 24 Port Switch

EE:

MDF - 2x 48 Port Switches, 2x 24 Port Switches
A207 - 1x 24 Port Switch
C303 - 2x 48 Port Switches
F214 - 1x 24 Port Switch
G225 - 1x 48 Port Switches
H222 - 1x 48 Port Switch
I233 - 1x 24 Port Switches
J236 - 1x 48 Port Switches
K244 - 1x 24 Port Switch
L240 - 1x 24 Port Switch
P1 - 1x 24 Port Switch
P3 - 1x 48 Port Switch
P5 - 1x 24 Port Switch
P8 - 1x 48 Port Switch
P9 - 1x 48 Port Switch
P11 - 1x 48 Port Switch
Cafeteria/Gym - 1x 48 Port Switch

FTE:

MDF - 6x 48 Port Switches, 1x 3750
30 IDF - Supplies Area - 2x 48 Port Switches
40 IDF - Lounge - 2x 48 Port Switches
Library - 1x 24 Port Switch
P65 - 1x 24 Port Switch
P68 - 1x 24 Port Switch
P70 - 2x 24 Port Switches
Kitchen - 1x 48 Port Switch (not on floorplans)

HCMS:

MDF - Rm 300E - 9x 48 Port Switches
IDF A - Rm101a - 8x 48 Port Switches
IDF3 - Rm500B - 6x 48 Port Switches
IDF E100 - RmE100 - 2x 48 Port Switches

IDF Gym - 1x 24 Port Switch
Choir - 1x 24 Port Switch - no APs Supported

VVE:

MDF - Rm110a - 7x 48 Port Switches, 1x 3750
IDF - Server Room - 4x 48 Port Switches
Gym IDF - 1x 24 Port Switch
P402 - 1x 24 Port Switch
P404 - 1x 24 Port Switch
P405 - 1x 24 Port Switch

WHS & NGC:

MDF - 5x 48 Port Switches, 1x 6509
NOC Horizontal Drops Support - 1x 48 Port Switches, 2x 6509
NOC -- Data Center Support - See "Data Centers" Items Below
Stadium - 2x 48 Port Switches, 1x 24 Port Switch
IDF Soccer - 6x 48 Port Switches
IDF PBX21 - 11x 48 Port Switches
NGC MDF - 8x 48 Port Switches
TLC - 2x 48 Port Switches
Transportation: 3x 48 Port Switches
Tennis - 1x 48 Port Switch
AEP Portable - 1x 48 Port Switch
IDF 11 - 3x 48 Port Switches
IDF 11a - FAF - 3x 48 Port Switches
Hub 12 - 9x 48 Port Switches
IDF ELC15 - 3x 48 Port Switches
IDF Pottery - RM157 - 1x 24 Port Switch
IDF Weight Room - 6x 48 Port Switches
Band IDF - 2x 48 Port Switches
PAC Storage - 2x 48 Port Switches
IDF Hub33 - 10x 48 Port Switches
IDF 310 - 4x 48 Port Switches + 1x 24 Port Switch
IDF ELC32 - 4x 48 Port Switches
IDF Kitchen - 1x 48 Port Switch (not shown on plans)

WRMS:

MDF - Library - 11x 48 Port Switches
Office IDF - 3x 48 Port Switches
Mechanical IDF - 3x 48 Port Switches
Science IDF - 3x 48 Port Switches
Girls Locker room - 1x 24 Port Switch

Data Centers: Per the RFP, both Data Centers are to be equipped with new core switches with blades and SM fiber-based uplink modules, as required, to support all WAN-based school connections and to connect to each other so as to link them together to provide WAN/ Core redundancy. These core switches will also be used to connect servers, storage, VoIP voice systems, network appliances and backup equipment as well as any "top-of-rack" switches that may be required to service District needs into the next 5-to-9 year timeframe.

Additionally, to support VM Ware and local network iSCSI-based, storage in each data center, a total of six (6) 24-port 10G Fiber-based switches will be required (3 at each facility).

DOC - Will require all new equipment

- 1) Upwards of 300 UTP Ports for Workstations, Cameras, Printers, and other network attached equipment.
- 2) Up to 10APs will need to be supported using MultiGigabit switches with PoE+ capabilities.

NOC: Current Equipment part of which may be used to support "air-gapped" network, if such a system is developed and adopted

- 2x Cisco 6509 Chassis w/ mix 24- & 48-blades UTP and
6 mixed FOC blades 24-ports
- 1x Cisco 3560G-48
- 2x Cisco Nexus 5548UP w/ 3x 10G Modules
- 4x Cisco 2448TP Fabric Extenders